V.—Note on the Genus Pterocyclos of Mr. Benson and Spiraculum of Mr. Pearson. By Dr. William Bland.

On the 27th of May last, I was fortunate enough to fall in with a shell of this genus, on the islet of Susson, one of the Boontin group, opposite to the peak of Queda, and in sight of Pulo-Pinang. Although the general description of my specimen answers to those above-mentioned, vet in some particulars it differs from both. The mouth is circular, its upper half marked inside by a double slightly raised line, from whence the pterygoid process is sent off which overhangs and forms the sinus, but the inside edge of this process does not touch the penultimate whorl as in Mr. Benson's shell, and it certainly differs from those of Mr. Pearson. In the specimen of Pulo-Susson, the sinus is 10 of an inch from the rings above-mentioned to the outside arch, and from this arch to the extremity of the wing which overhangs and forms the sinus is 30 th of an inch; the wing in breadth is $\frac{6}{10}$ th, mouth thickened, which thickening is carried on to strengthen the wing on its upper part. Shell one inch in diameter, with dark orange zig-zag lines across the whorls, and a band of a darker colour running longitudinally on the centre of the last whorl. Animal recently dead, but in a state of decay, so that nothing could be made out of it.

As one drawing is worth many descriptions, I have cut a leaf out of my book, having two figures of the natural size of the shell in question, No. 1, for your inspection; and, to assist in elucidating the history of this genus of beautiful shells, I have added another figure, No. 2, found at *Trincomalee*.

This shell has a small pterygoid process bending down, and in contact with the penultimate whorl, extending $\frac{1}{8}$ th of an inch in front of the circular mouth, but no vestige of tube or sinus obtains in this specimen; lip thickened and reflected; the shell having all the appearance of maturity; diameter $\frac{7}{10}$ th of an inch; operculum convex, horny-formed, of circular layers.

Note on Dr. Bland's Paper.

The Susson species appears, from the drawing forwarded with the description, to belong to the typical group of Pterocyclos, which includes P. parvus and rupestris, and to be intermediate between the latter species and hispidus, to the last of which it exhibits an approach in the irregular aperture and dilated and thickened wing; but in the absence of a specimen for comparison, no specific character can be assigned with safety.

The Trincomalee shell is interesting as an arborant form, indicating the passage to Cyclostoma, which it approaches through the alate species, C. petiocrianum of Gray. It appears to possess the convex operculum composed of spirally concentric and exserted laminæ which characterizes the typical species of pterocyclos. This character seems to be gradually developed in the opercula of the Cyclostomadæ as the umbilicus widens, and the shell becomes more discoid; varying from the flat operculum of C. elegans through that of C. involvulus, where the edges of the laminæ are partially disengaged, and that of C. termistriatum, which is thickened and shews a strong spiral keel, to the convex and spirally laminar structure of the pterocycloid group.

The species of *Cyclostoma* from *Neemuch*, described by Lieutenant Hutton as No. 26, in page 520, vol. iii. J. A. S. I have ascertained by a comparison of specimens to be *C. semistriatum* of Sowerby, whose examples were procured from *Poona*.

Query. May not the impression of a supposed species of Cirrus noticed in Dr. Ward's paper on the geology of the Elephant Rock in the Queda country, printed in the second part Trans. Phys. Class, p. 166, be that of one of Dr. Bland's species of Pterocyclos from Pulo-Susson? A reference to the specimen No. 4 will decide.

VI.—Note on the Nautical Instruments of the Arabs. By James Prinsep, Sec.

Since the arrival of the Arab vessels which annually frequent the port of Calcutta, I have made diligent inquiries concerning the instrument in use among them for the measurement of the latitude, in hopes of elucidating thereby the Baron Von Hammer's translation of the "Mohit" (see p. 442). I have been hitherto unsuccessful, the English quadrant or sextant having generally superseded the more ancient and clumsy apparatus. One Muallim, however, seemed to recognize the instrument perfectly by my description, though he could not explain its construction; and promised to bring me one on his next voyage:—he stretched out his arms, when I inquired about the issabah division, and placing his fingers together horizontally, counted with them the height of the polar star, just as I guessed must have been the early and rude method of the Arab navigators.

At length in a vessel from the *Maldive* islands I met with an intelligent navigator who brought me the primitive instruments with which he was accustomed to work his way to *Calcutta*,—and as I do not think they are generally known, while it is certain they are of Arabic origin, I hasten to describe them as lithographed in Plate XLVIII.